



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# PUBLIC HEALTH REPORTS

---

VOL. XXVII.

SEPTEMBER 27, 1912.

No. 39.

---

## THE PLAGUE SITUATION.

### PORTO RICO.

No case of plague has occurred in Porto Rico since the one reported at La Perla September 12. The total number of human cases reported to the present time remains 57.

During the week ended September 14 two plague-infected rats were found in Puerta de Tierra.

### CALIFORNIA.

A plague-infected squirrel was found in Contra Costa County, on August 31 and one in Alameda County September 5. The diagnosis in each case was verified bacteriologically.

### HONGKONG, CHINA.

During the week ended August 3 there were reported in Hongkong 15 cases of plague with 13 deaths.

---

## POLIOMYELITIS (INFANTILE PARALYSIS).

### POLIOMYELITIS TRANSMITTED BY THE BITING FLY, *STOMOXYS CALCITRANS*.

Prof. M. J. Rosenau, of Harvard University, announced at a meeting of the Fifteenth International Congress on Hygiene and Demography at Washington, September 26, that he had apparently succeeded in transmitting poliomyelitis (infantile paralysis) from sick to well monkeys by the bite of the common biting fly, *Stomoxys calcitrans*. He allowed a number of these flies to bite monkeys sick with poliomyelitis in various stages of the disease and then later allowed these same flies to bite 12 well monkeys. Of the 12 well monkeys thus bitten 6 became sick with well-marked symptoms of poliomyelitis, and of these, 3 died. Three of the 6 monkeys thus infected had diarrhea and symptoms of enteritis during the course of the illness.

The *Stomoxys calcitrans* resembles in size and appearance the common house fly. It is most frequently found in and around stables. It is, however, by no means uncommon in houses. It bites animals as well as man, and sucks their blood, upon which it feeds.

Dr. Rosenau concluded from his experiments that, after the virus of poliomyelitis is taken into the body of the fly by biting an infected animal or person, some time must elapse before the fly is capable of transmitting the disease, and that the period which must thus elapse is probably less than 21 days.

**SUBSIDENCE OF OUTBREAK AT LOS ANGELES, CAL.**

During the week ended September 14 no case of poliomyelitis was reported in Los Angeles. One case, however, was brought into the city from Chino and admitted to the municipal hospital.

---

**A SQUIRREL DESTROYER.****AN EFFICIENT AND ECONOMICAL METHOD OF DESTROYING  
GROUND SQUIRRELS.**

By JOHN D. LONG, Passed Assistant Surgeon, United States Public Health Service.

In May, 1912, after a careful study of the ground-squirrel situation in California, it seemed certain that the destruction of squirrels by means of poisoned grain and carbon bisulphide by the waste-ball method would be a long, tedious, and expensive process.

The use of poisoned grain while effective is faulty in one essential, namely, the cooperation of the squirrel himself must be obtained, i. e., he must eat the poison or place it in his cheek pouch to carry it to his burrow, and as this cooperation can not always be obtained the method fails to produce complete results. The reasons for this failure are probably as follows: Other natural foods, such as nuts, seeds, grasses, or at times vegetables and fruits, are obtainable and the poisoned grain is not taken; this factor is operative particularly in the wet season; hence the grain can be used most effectively during those months in which there is little or no rain, namely, July, August, September, October, and part of November. During the remainder of the year the results to be obtained by its use are not nearly so good.

Carbon bisulphide used by saturating balls of waste and exploding in the burrow is effective but expensive, and can be used only during the wet season when the ground is damp and will hold the gases of combustion. This substance can also be used by saturating balls of waste, placing in the burrow, closing the same, and allowing the gas to diffuse throughout the burrow. The men in the field, however, are of the opinion that this method is not as effective as where the gas is exploded.

From various observations that have been made, the conclusion has been reached that in order to obtain good results a given area of land must be gone over from four to five times with poisoned grain, preferably in the dry season, when no other food is available. The cost of this procedure is at least 35 cents per acre for all expenses. A few squirrels will, however, be left, and the next year, after the breeding season, these will have multiplied about eightfold.

The difficulty attendant upon destroying these remaining squirrels was recently shown in the Altamont section of Alameda County, where the inspector in charge, after exhausting all means of inducing the squirrels to eat the grain, finally destroyed them by placing a quantity of chlorinated lime in their holes and covering them up.

To effectually destroy squirrels with carbon bisulphide by the waste-ball method the land must be gone over twice at least, the